



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,080	11/13/2001	Jerome P. Ranch	0881	6034

27310 7590 02/10/2005

PIONEER HI-BRED INTERNATIONAL INC.  
7100 N.W. 62ND AVENUE  
P.O. BOX 1000  
JOHNSTON, IA 50131

EXAMINER

KALLIS, RUSSELL

ART UNIT PAPER NUMBER

1638

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/993,080

Applicant(s)

RANCH ET AL.

Examiner

Russell Kallis

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10,12-34,36-49,51,53-55 and 62 is/are pending in the application.
- 4a) Of the above claim(s) 3,7-10,14-24,27,31-34,38-48,51 and 62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,12,13,25,26,28-30,36,37,49 and 53-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/29/2004 has been entered.

Claims 11, 35, 50, 52 and 56-61 have been cancelled. Claims 3, 7-10, 14-24, 27, 31-34, 38-48, 51 and 62 are withdrawn. Claims 1-2, 4-6, 12-13, 25-26, 28-30, 36-37, 49 and 53-55 are examined.

Rejection of Claims 1-2, 4-6, 11-12, 25-26, 28-30, 35-36, 49-50, 52-54 and 58-60 under 35 U.S.C. 102(b) is withdrawn in view of Applicant's amendments.

### ***Claim Rejections - 35 USC § 103***

Claims 1-2, 4-6, 12-13, 25-26, 28-30, 36-37, 49 and 53-55 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Dunder E. *et al.* in Maize Transformation by Microprojectile Bombardment of Immature Embryos; Springer-Verlag, Berlin-Heidelberg; pages 127-138. This rejection is maintained for the reasons of record set forth in the Official action mailed 2/04/2004. Applicant's arguments filed 5/04/2004 have been considered but are not deemed persuasive.

Art Unit: 1638

Dunder teaches excision and direct placement of immature maize embryos upon osmotic treatment medium for 3 to 4 hours for a same day transformation by microprojectile bombardment (page 134), wherein the osmotic pretreatment comprises auxin-depleted MS medium lacking phytohormones (i.e. MS medium containing osmoticum as taught by Vain and incorporated through reference) containing various percentages of sucrose i.e. 6, 12 and 18% (see page 130, lines 20-21 and page 134); bombardment pressure ranging from 200 to 1550 p.s.i.; particle flight distance ranging from 3-9 cm (page 131); 1 micron sized gold particles (page 133); regeneration into a transgenic maize plant (page 137 and in Vain *et al.*; page 87, Column 2 incorporated through reference); and thus the reference teaches all the limitations of Claims 1-2, 4-6, 11-12, 25-26, 28-30, 35-36, 49-50, 52-54 and 58-60.

Applicant asserts that a reasonable expectation of success is not found in Dunder (response page 11, end of page). Dunder successfully transforms freshly isolated embryos as discussed supra and teaches excision and direct placement of immature maize embryos upon osmotic treatment medium for 3 to 4 hours for a same day transformation by microprojectile bombardment (see page 134). Moreover, Applicant has not distinguished their invention from what is taught in the prior art. See *In re Lindner*, 173 USPQ 356 (CCPA 1972) and *In re Grasselli*, 218 USPQ 769 (Fed. Cir. 1983) which teach that the evidence of nonobviousness should be commensurate with the scope of the claims.


All claims are rejected.

Art Unit: 1638

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (571) 272-0798. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Russell Kallis Ph.D.  
January 28, 2005